



SEQUENCE LISTING

<110> GROZINGER, CHRISTINA M.
HASSIG, CHRISTIAN A.
SCHREIBER, STUART L.

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Ala	Ile	Ala	Ser	Thr	Glu	Val	Lys	Leu	Arg	Leu	Gln	Glu	Phe	Leu	Leu	180	185	190
Ser	Lys	Ser	Lys	Glu	Pro	Thr	Pro	Gly	Gly	Leu	Asn	His	Ser	Leu	Pro	195	200	205
Gln	His	Pro	Lys	Cys	Trp	Gly	Ala	His	His	Ala	Ser	Leu	Asp	Gln	Ser	210	215	220
Ser	Pro	Pro	Gln	Ser	Gly	Pro	Pro	Gly	Thr	Pro	Pro	Ser	Tyr	Lys	Leu	225	230	235
Pro	Leu	Pro	Gly	Pro	Tyr	Asp	Ser	Arg	Asp	Asp	Phe	Pro	Leu	Arg	Lys	245	250	255
Thr	Ala	Ser	Glu	Pro	Asn	Leu	Lys	Val	Arg	Ser	Arg	Leu	Lys	Gln	Lys	260	265	270
Val	Ala	Glu	Arg	Arg	Ser	Ser	Pro	Leu	Leu	Arg	Arg	Lys	Asp	Gly	Thr	275	280	285
Val	Ile	Ser	Thr	Phe	Lys	Lys	Arg	Ala	Val	Glu	Ile	Thr	Gly	Ala	Gly	290	295	300
Pro	Gly	Ala	Ser	Ser	Val	Cys	Asn	Ser	Ala	Pro	Gly	Ser	Gly	Pro	Ser	305	310	315
Ser	Pro	Asn	Ser	Ser	His	Ser	Thr	Ile	Ala	Glu	Asn	Gly	Phe	Thr	Gly	325	330	335
Ser	Val	Pro	Asn	Ile	Pro	Thr	Glu	Met	Leu	Pro	Gln	His	Arg	Ala	Leu	340	345	350
Pro	Leu	Asp	Ser	Ser	Pro	Asn	Gln	Phe	Ser	Leu	Tyr	Thr	Ser	Pro	Ser	355	360	365
Leu	Pro	Asn	Ile	Ser	Leu	Gly	Leu	Gln	Ala	Thr	Val	Thr	Val	Thr	Asn	370	375	380
Ser	His	Leu	Thr	Ala	Ser	Pro	Lys	Leu	Ser	Thr	Gln	Gln	Glu	Ala	Glu	385	390	395
Arg	Gln	Ala	Leu	Gln	Ser	Leu	Arg	Gln	Gly	Gly	Thr	Leu	Thr	Gly	Lys	405	410	415
Phe	Met	Ser	Thr	Ser	Ser	Ile	Pro	Gly	Cys	Leu	Leu	Gly	Val	Ala	Leu	420	425	430
Glu	Gly	Asp	Gly	Ser	Pro	His	Gly	His	Ala	Ser	Leu	Leu	Gln	His	Val	435	440	445
Leu	Leu	Leu	Glu	Gln	Ala	Arg	Gln	Gln	Ser	Thr	Leu	Ile	Ala	Val	Pro	450	455	460
Leu	His	Gly	Gln	Ser	Pro	Leu	Val	Thr	Gly	Glu	Arg	Val	Ala	Thr	Ser	465	470	475

Met	Arg	Thr	Val	Gly	Lys	Leu	Pro	Arg	His	Arg	Pro	Leu	Ser	Arg	Thr	485	490	495
Gln	Ser	Ser	Pro	Leu	Pro	Gln	Ser	Pro	Gln	Ala	Leu	Gln	Gln	Leu	Val	500	505	510
Met	Gln	Gln	Gln	His	Gln	Gln	Phe	Leu	Glu	Lys	Gln	Lys	Gln	Gln	Gln	515	520	525
Leu	Gln	Leu	Gly	Lys	Ile	Leu	Thr	Lys	Thr	Gly	Glu	Leu	Pro	Arg	Gln	530	535	540
Pro	Thr	Thr	His	Pro	Glu	Glu	Thr	Glu	Glu	Glu	Leu	Thr	Glu	Gln	Gln	545	550	555
Glu	Val	Leu	Leu	Gly	Glu	Gly	Ala	Leu	Thr	Met	Pro	Arg	Glu	Gly	Ser	565	570	575
Thr	Glu	Ser	Glu	Ser	Thr	Gln	Glu	Asp	Leu	Glu	Glu	Glu	Asp	Glu	Glu	580	585	590
Glu	Asp	Gly	Glu	Glu	Glu	Glu	Asp	Cys	Ile	Gln	Val	Lys	Asp	Glu	Glu	595	600	605
Gly	Glu	Ser	Gly	Ala	Glu	Glu	Gly	Pro	Asp	Leu	Glu	Glu	Pro	Gly	Ala	610	615	620
Gly	Tyr	Lys	Lys	Leu	Phe	Ser	Asp	Ala	Gln	Pro	Leu	Gln	Pro	Leu	Gln	625	630	635
Val	Tyr	Gln	Ala	Pro	Leu	Ser	Leu	Ala	Thr	Val	Pro	His	Gln	Ala	Leu	645	650	655
Gly	Arg	Thr	Gln	Ser	Ser	Pro	Ala	Ala	Pro	Gly	Gly	Met	Lys	Ser	Pro	660	665	670
Pro	Asp	Gln	Pro	Val	Lys	His	Leu	Phe	Thr	Thr	Gly	Val	Val	Tyr	Asp	675	680	685
Thr	Phe	Met	Leu	Lys	His	Gln	Cys	Met	Cys	Gly	Asn	Thr	His	Val	His	690	695	700
Pro	Glu	His	Ala	Gly	Arg	Ile	Gln	Ser	Ile	Trp	Ser	Arg	Leu	Gln	Glu	705	710	715
Thr	Gly	Leu	Leu	Ser	Lys	Cys	Glu	Arg	Ile	Arg	Gly	Arg	Lys	Ala	Thr	725	730	735
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Gly	Val	Asp	Ser	Asp	Thr	Val	Trp	Asn	Glu	Met	His	Ser	Ser	Ser	Ala	785	790	795	800
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His	Ala	Glu	Glu	Ser	Thr	Ala	Met	Gly	Phe	Cys	Phe	Phe	Asn	Ser	Val	835	840	845	
Ala	Ile	Thr	Ala	Lys	Leu	Leu	Gln	Gln	Lys	Leu	Asn	Val	Gly	Lys	Val	850	855	860	
Leu	Ile	Val	Asp	Trp	Asp	Ile	His	His	Gly	Asn	Gly	Thr	Gln	Gln	Ala	865	870	875	880
Phe	Tyr	Asn	Asp	Pro	Ser	Val	Leu	Tyr	Ile	Ser	Leu	His	Arg	Tyr	Asp	885	890	895	
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Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val	Ser	Ala	Leu	Leu	Ser	1010	1015	1020	
Val	Glu	Leu	Gln	Pro	Leu	Asp	Glu	Ala	Val	Leu	Gln	Gln	Lys	Pro	Asn	1025	1030	1035	1040
Ile	Asn	Ala	Val	Ala	Thr	Leu	Glu	Lys	Val	Ile	Glu	Ile	Gln	Ser	Lys	1045	1050	1055	
His	Trp	Ser	Cys	Val	Gln	Lys	Phe	Ala	Ala	Gly	Leu	Gly	Arg	Ser	Leu	1060	1065	1070	
Arg	Glu	Ala	Gln	Ala	Gly	Glu	Thr	Glu	Glu	Ala	Glu	Thr	Val	Ser	Ala	1075	1080	1085	

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Ala Leu

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Arg Gln Asn Pro Gln Ser Pro Pro Gln Asp Ser Ser Val Thr Ser Lys
      20              25              30

```

```

Arg Asn Ile Lys Lys Gly Ala Val Pro Arg Ser Ile Pro Asn Leu Ala
      35              40              45

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```

Glu Val Lys Lys Lys Gly Lys Met Lys Lys Leu Gly Gln Ala Met Glu
      50              55              60

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Glu Asp Leu Ile Val Gly Leu Gln Gly Met Asp Leu Asn Leu Glu Ala
      65              70              75              80

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```

Glu Ala Leu Ala Gly Thr Gly Leu Val Leu Asp Glu Gln Leu Asn Glu
      85              90              95

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Phe His Cys Leu Trp Asp Asp Ser Phe Pro Glu Gly Pro Glu Arg Leu
      100             105             110

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His Ala Ile Lys Glu Gln Leu Ile Gln Glu Gly Leu Leu Asp Arg Cys
      115             120             125

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Val Ser Phe Gln Ala Arg Phe Ala Glu Lys Glu Glu Leu Met Leu Val
      130             135             140

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His Ser Leu Glu Tyr Ile Asp Leu Met Glu Thr Thr Gln Tyr Met Asn
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His	Pro	Asn	Ser	Tyr	Ser	Cys	Ala	Cys	Leu	Ala	Ser	Gly	Ser	Val	Leu	180	185	190
Arg	Leu	Val	Asp	Ala	Val	Leu	Gly	Ala	Glu	Ile	Arg	Asn	Gly	Met	Ala	195	200	205
Ile	Ile	Arg	Pro	Pro	Gly	His	His	Ala	Gln	His	Ser	Leu	Met	Asp	Gly	210	215	220
Tyr	Cys	Met	Phe	Asn	His	Val	Ala	Val	Ala	Ala	Arg	Tyr	Ala	Gln	Gln	225	230	235
Lys	His	Arg	Ile	Arg	Arg	Val	Leu	Ile	Val	Asp	Trp	Asp	Val	His	His	245	250	255
Gly	Gln	Gly	Thr	Gln	Phe	Thr	Phe	Asp	Gln	Asp	Pro	Ser	Val	Leu	Tyr	260	265	270
Phe	Ser	Ile	His	Arg	Tyr	Glu	Gln	Gly	Arg	Phe	Trp	Pro	His	Leu	Lys	275	280	285
Ala	Ser	Asn	Trp	Ser	Thr	Thr	Gly	Phe	Gly	Gln	Gly	Gln	Gly	Tyr	Thr	290	295	300
Ile	Asn	Val	Pro	Trp	Asn	Gln	Val	Gly	Met	Arg	Asp	Ala	Asp	Tyr	Ile	305	310	315
Ala	Ala	Phe	Leu	His	Val	Leu	Leu	Pro	Val	Ala	Leu	Glu	Phe	Gln	Pro	325	330	335
Gln	Leu	Val	Leu	Val	Ala	Ala	Gly	Phe	Asp	Ala	Leu	Gln	Gly	Asp	Pro	340	345	350
Lys	Gly	Glu	Met	Ala	Ala	Thr	Pro	Ala	Gly	Phe	Ala	Gln	Leu	Thr	His	355	360	365
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Gly	Tyr	Asn	Leu	Arg	Ala	Leu	Ala	Glu	Gly	Val	Ser	Ala	Ser	Leu	His	385	390	395
Thr	Leu	Leu	Gly	Asp	Pro	Cys	Pro	Met	Leu	Glu	Ser	Pro	Gly	Ala	Pro	405	410	415
Cys	Arg	Ser	Ala	Gln	Ala	Ser	Val	Ser	Cys	Ala	Leu	Glu	Ala	Leu	Glu	420	425	430
Pro	Phe	Trp	Glu	Val	Leu	Val	Arg	Ser	Thr	Glu	Thr	Val	Glu	Arg	Asp	435	440	445
Asn	Met	Glu	Glu	Asp	Asn	Val	Glu	Glu	Ser	Glu	Glu	Glu	Gly	Pro	Trp	450	455	460

Glu	Pro	Pro	Val	Leu	Pro	Ile	Leu	Thr	Trp	Pro	Val	Leu	Gln	Ser	Arg	465	470	475	480
Thr	Gly	Leu	Val	Tyr	Asp	Gln	Asn	Met	Met	Asn	His	Cys	Asn	Leu	Trp	485	490	495	
Asp	Ser	His	His	Pro	Glu	Val	Pro	Gln	Arg	Ile	Leu	Arg	Ile	Met	Cys	500	505	510	
Arg	Leu	Glu	Glu	Leu	Gly	Leu	Ala	Gly	Arg	Cys	Leu	Thr	Leu	Thr	Pro	515	520	525	
Arg	Pro	Ala	Thr	Glu	Ala	Glu	Leu	Leu	Thr	Cys	His	Ser	Ala	Glu	Tyr	530	535	540	
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Arg	Glu	Ser	Ser	Asn	Phe	Asp	Ser	Ile	Tyr	Ile	Cys	Pro	Ser	Thr	Phe	565	570	575	
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Val	Leu	Ser	Gly	Glu	Val	Leu	Asn	Gly	Ala	Ala	Val	Val	Arg	Pro	Pro	595	600	605	
Gly	His	His	Ala	Glu	Gln	Asp	Ala	Ala	Cys	Gly	Phe	Cys	Phe	Phe	Asn	610	615	620	
Ser	Val	Ala	Val	Ala	Ala	Arg	His	Ala	Gln	Thr	Ile	Ser	Gly	His	Ala	625	630	635	640
Leu	Arg	Ile	Leu	Ile	Val	Asp	Trp	Asp	Val	His	His	Gly	Asn	Gly	Thr	645	650	655	
Gln	His	Met	Phe	Glu	Asp	Asp	Pro	Ser	Val	Leu	Tyr	Val	Ser	Leu	His	660	665	670	
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Trp	Asn	Gly	Pro	Arg	Met	Gly	Asp	Ala	Asp	Tyr	Leu	Ala	Ala	Trp	His	705	710	715	720
Arg	Leu	Val	Leu	Pro	Ile	Ala	Tyr	Glu	Phe	Asn	Pro	Glu	Leu	Val	Leu	725	730	735	
Val	Ser	Ala	Gly	Phe	Asp	Ala	Ala	Arg	Gly	Asp	Pro	Leu	Gly	Gly	Cys	740	745	750	
Gln	Val	Ser	Pro	Glu	Gly	Tyr	Ala	His	Leu	Thr	His	Leu	Leu	Met	Gly	755	760	765	

Leu Ala Ser Gly Arg Ile Ile Leu Ile Leu Glu Gly Gly Tyr Asn Leu
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Thr Ser Ile Ser Glu Ser Met Ala Ala Cys Thr Arg Ser Leu Leu Gly
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Asp Pro Pro Pro Leu Leu Thr Leu Pro Arg Pro Pro Leu Ser Gly Ala
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Leu Ala Ser Ile Thr Glu Thr Ile Gln Val His Arg Arg Tyr Trp Arg
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Ser Leu Arg Val Met Lys Val Glu Asp Arg Glu Gly Pro Ser Ser Ser
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Lys Leu Val Thr Lys Lys Ala Pro Gln Pro Ala Lys Pro Arg Leu Ala
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 915 920 925

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Ile Leu Asp Gln Thr Thr Ser Glu Asp Ala Val Gly Gly Ala Thr Leu
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Gly Gln Thr Thr Ser Glu Glu Ala Val Gly Gly Ala Thr Leu Ala Gln
 980 985 990

Thr Ile Ser Glu Ala Ala Met Glu Gly Ala Thr Leu Asp Gln Thr Thr
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Gln Xaa Xaa Phe Xaa Xaa Asp Pro Ser Val Leu Tyr Xaa Ser Xaa His
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<211> 73
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<213> Homo sapiens

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 <211> 912
 <212> PRT
 <213> Homo sapiens

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 Phe Leu Ala Gly Leu Gln Gln Gln Arg Ser Val Glu Pro Met Arg Leu
 35 40 45
 Ser Met Asp Thr Pro Met Pro Glu Leu Gln Val Gly Pro Gln Glu Gln
 50 55 60
 Glu Leu Arg Gln Leu Leu His Lys Asp Lys Ser Lys Arg Ser Ala Val

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Ala Ser Ser Val	Val Lys Gln Lys Leu	Ala Glu Val Ile Leu	Lys Lys			
	85		90		95	
Gln Gln Ala Ala	Leu Glu Arg Thr Val	His Pro Asn Ser	Pro Gly Ile			
	100		105		110	
Pro Tyr Arg Thr	Leu Glu Pro Leu Glu Thr	Glu Gly Ala Thr	Arg Ser			
	115		120		125	
Met Leu Ser Ser	Phe Leu Pro Pro Val	Pro Ser Leu Pro	Ser Asp Pro			
	130		135		140	
Pro Glu His Phe	Pro Leu Arg Lys Thr	Val Ser Glu Pro	Asn Leu Lys			
145		150		155		160
Leu Arg Tyr Lys	Pro Lys Lys Ser Leu	Glu Arg Arg Lys	Asn Pro Leu			
	165		170		175	
Leu Arg Lys Glu	Ser Ala Pro Pro Ser	Leu Arg Arg Arg	Pro Ala Glu			
	180		185		190	
Thr Leu Gly Asp	Ser Ser Pro Ser Ser	Ser Ser Thr	Pro Ala Ser Gly			
	195		200		205	
Cys Ser Ser Pro	Asn Asp Ser Glu His	Gly Pro Asn Pro	Ile Leu Gly			
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Asp Ser Asp Arg	Arg Thr His Pro Thr	Leu Gly Pro Arg	Gly Pro Ile			
225		230		235		240
Leu Gly Ser Pro	His Thr Pro Leu Phe	Leu Pro His Gly	Leu Glu Pro			
	245		250		255	
Glu Ala Gly Gly	Thr Leu Pro Ser Arg	Leu Gln Pro Ile	Leu Leu Leu			
	260		265		270	
Asp Pro Ser Gly	Ser His Ala Pro Leu	Leu Thr Val Pro	Gly Leu Gly			
	275		280		285	
Pro Leu Pro Phe	His Phe Ala Gln Ser	Leu Met Thr Thr	Glu Arg Leu			
	290		295		300	
Ser Gly Ser Gly	Leu His Trp Pro Leu	Ser Arg Thr Arg	Ser Glu Pro			
305		310		315		320
Leu Pro Pro Ser	Ala Thr Ala Pro Pro	Pro Pro Gly Pro	Met Gln Pro			
	325		330		335	
Arg Leu Glu Gln	Leu Lys Thr His Val	Gln Val Ile Lys	Arg Ser Ala			
	340		345		350	
Lys Pro Ser Glu	Lys Pro Arg Leu Arg	Gln Ile Pro Ser	Ala Glu Asp			
	355		360		365	
Leu Glu Thr Asp	Gly Gly Gly Pro Gly	Gln Val Val Asp	Asp Gly Leu			

370	375	380
Glu His Arg Glu Leu Gly	His Gly Gln Pro	Glu Ala Arg Gly Pro Ala
385	390	395 400
Pro Leu Gln Gln His	Pro Gln Val Leu	Leu Trp Glu Gln Gln Arg Leu
405	410	415
Ala Gly Arg Leu Pro Arg Gly Ser	Thr Gly Asp Thr Val	Leu Leu Pro
420	425	430
Leu Ala Gln Gly Gly His Arg	Pro Leu Ser Arg Ala	Gln Ser Ser Pro
435	440	445
Ala Ala Pro Ala Ser Leu Ser	Ala Pro Glu Pro	Ala Ser Gln Ala Arg
450	455	460
Val Leu Ser Ser Ser Glu Thr	Pro Ala Arg Thr	Leu Pro Phe Thr Thr
465	470	475 480
Gly Leu Ile Tyr Asp Ser Val Met	Leu Lys His Gln Cys Ser	Cys Gly
485	490	495
Asp Asn Ser Arg His Pro Glu His	Ala Gly Arg Ile Gln Ser	Ile Trp
500	505	510
Ser Arg Leu Gln Glu Arg Gly	Leu Arg Ser Gln Cys	Glu Cys Leu Arg
515	520	525
Gly Arg Lys Ala Ser Leu Glu Glu	Leu Gln Ser Val His Ser	Glu Arg
530	535	540
His Val Leu Leu Tyr Gly Thr Asn	Pro Leu Ser Arg Leu Lys	Leu Asp
545	550	555 560
Asn Gly Lys Leu Ala Gly Leu Leu	Ala Gln Arg Met Phe Val	Met Leu
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Pro Cys Gly Gly Val Gly Val Asp	Thr Asp Thr Ile Trp Asn	Glu Leu
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His Ser Ser Asn Ala Ala Arg Trp	Ala Ala Gly Ser Val Thr	Asp Leu
595	600	605
Ala Phe Lys Val Ala Ser Arg Glu	Leu Lys Asn Gly Phe Ala	Val Val
610	615	620
Arg Pro Pro Gly His His Ala Asp	His Ser Thr Ala Met Gly Phe	Cys
625	630	635 640
Phe Phe Asn Ser Val Ala Ile Ala	Cys Arg Gln Leu Gln Gln Gln	Ser
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Lys Ala Ser Lys Ile Leu Ile Val	Asp Trp Asp Val His His	Gly Asn
660	665	670
Gly Thr Gln Gln Thr Phe Tyr Gln	Asp Pro Ser Val Leu Tyr	Ile Ser

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Trp	Ala	Gly	Gly	Leu	Asp	Pro	Pro	Met	Gly	Asp	Pro	Glu	Tyr	Leu	Ala
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Pro	Leu	Gly	Gly	Tyr	His	Val	Ser	Ala	Lys	Cys	Phe	Gly	Tyr	Met	Thr
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Gly	Gly	His	Asp	Leu	Thr	Ala	Ile	Cys	Asp	Ala	Ser	Glu	Ala	Cys	Val
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Lys	Gln	Lys	Pro	Asn	Leu	Asn	Ala	Ile	Arg	Ser	Leu	Glu	Ala	Val	Ile
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Pro	Asp	Ser	Trp	Val	Pro	Arg	Val	Pro	Gly	Ala	Asp	Lys	Glu	Glu	Val
865					870					875					880
Glu	Ala	Val	Thr	Ala	Leu	Ala	Ser	Leu	Ser	Val	Gly	Ile	Leu	Ala	Glu
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 <213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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Met Met Pro Val Val Asp Pro Val Val Arg Glu Lys Gln Leu Gln Gln
  35             40             45

Glu Leu Leu Leu Ile Gln Gln Gln Gln Gln Ile Gln Lys Gln Leu Leu
  50             55             60

Ile Ala Glu Phe Gln Lys Gln His Glu Asn Leu Thr Arg Gln His Gln
  65             70             75             80

Ala Gln Leu Gln Glu His Ile Lys Glu Leu Leu Ala Ile Lys Gln Gln
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Gln Glu Leu Leu Glu Lys Glu Gln Lys Leu Glu Gln Gln Arg Gln Glu
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Gln Glu Val Glu Arg His Arg Arg Glu Gln Gln Leu Pro Pro Leu Arg
  115            120            125

Gly Lys Asp Arg Gly Arg Glu Arg Ala Val Ala Ser Thr Glu Val Lys
  130            135            140

Gln Lys Leu Gln Glu Phe Leu Leu Ser Lys Ser Ala Thr Lys Asp Thr
  145            150            155            160

Pro Thr Asn Gly Lys Asn His Ser Val Ser Arg His Pro Lys Leu Trp
  165            170            175

Tyr Thr Ala Ala His His Thr Ser Leu Asp Gln Ser Ser Pro Pro Leu
  180            185            190

Ser Gly Thr Ser Pro Ser Tyr Lys Tyr Thr Leu Pro Gly Ala Gln Asp
  195            200            205

Ala Lys Asp Asp Phe Pro Leu Arg Lys Thr Ala Ser Glu Pro Asn Leu
  210            215            220

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Lys	Val	Arg	Ser	Arg	Leu	Lys	Gln	Lys	Val	Ala	Glu	Arg	Arg	Ser	Ser	225	230	235	240
Pro	Leu	Leu	Arg	Arg	Lys	Asp	Gly	Asn	Val	Val	Thr	Ser	Phe	Lys	Lys	245	250	255	
Arg	Met	Phe	Glu	Val	Thr	Glu	Ser	Ser	Val	Ser	Ser	Ser	Ser	Pro	Gly	260	265	270	
Ser	Gly	Pro	Ser	Ser	Pro	Asn	Asn	Gly	Pro	Thr	Gly	Ser	Val	Thr	Glu	275	280	285	
Asn	Glu	Thr	Ser	Val	Leu	Pro	Pro	Thr	Pro	His	Ala	Glu	Gln	Met	Val	290	295	300	
Ser	Gln	Gln	Arg	Ile	Leu	Ile	His	Glu	Asp	Ser	Met	Asn	Leu	Leu	Ser	305	310	315	320
Leu	Tyr	Thr	Ser	Pro	Ser	Leu	Pro	Asn	Ile	Thr	Leu	Gly	Leu	Pro	Ala	325	330	335	
Val	Pro	Ser	Gln	Leu	Asn	Ala	Ser	Asn	Ser	Leu	Lys	Glu	Lys	Gln	Lys	340	345	350	
Cys	Glu	Thr	Gln	Thr	Leu	Arg	Gln	Gly	Val	Pro	Leu	Pro	Gly	Gln	Tyr	355	360	365	
Gly	Gly	Ser	Ile	Pro	Ala	Ser	Ser	Ser	His	Pro	His	Val	Thr	Leu	Glu	370	375	380	
Gly	Lys	Pro	Pro	Asn	Ser	Ser	His	Gln	Ala	Leu	Leu	Gln	His	Leu	Leu	385	390	395	400
Leu	Lys	Glu	Gln	Met	Arg	Gln	Gln	Lys	Leu	Leu	Val	Ala	Gly	Gly	Val	405	410	415	
Pro	Leu	His	Pro	Gln	Ser	Pro	Leu	Ala	Thr	Lys	Glu	Arg	Ile	Ser	Pro	420	425	430	
Gly	Ile	Arg	Gly	Thr	His	Lys	Leu	Pro	Arg	His	Arg	Pro	Leu	Asn	Arg	435	440	445	
Thr	Gln	Ser	Ala	Pro	Leu	Pro	Gln	Ser	Thr	Leu	Ala	Gln	Leu	Val	Ile	450	455	460	
Gln	Gln	Gln	His	Gln	Gln	Phe	Leu	Glu	Lys	Gln	Lys	Gln	Tyr	Gln	Gln	465	470	475	480
Gln	Ile	His	Met	Asn	Lys	Leu	Leu	Ser	Lys	Ser	Ile	Glu	Gln	Leu	Lys	485	490	495	
Gln	Pro	Gly	Ser	His	Leu	Glu	Glu	Ala	Glu	Glu	Glu	Leu	Gln	Gly	Asp	500	505	510	
Gln	Ala	Met	Gln	Glu	Asp	Arg	Ala	Pro	Ser	Ser	Gly	Asn	Ser	Thr	Arg	515	520	525	

Ser Asp Ser Ser Ala Cys Val Asp Asp Thr Leu Gly Gln Val Gly Ala
530 535 540

Val Lys Val Lys Glu Glu Pro Val Asp Ser Asp Glu Asp Ala Gln Ile
545 550 555 560

Gln Glu Met Glu Ser Gly Glu Gln Ala Ala Phe Met Gln Gln Val Ile
565 570 575

Gly Lys Asp Leu Ala Pro Gly Phe Val Ile Lys Val Ile Ile
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<400> 15

His His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp
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Ile Val Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu
20 25 30

Tyr Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe
35 40 45

Tyr Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu
50 55 60

Tyr Phe Pro Gly Thr
65

<210> 16

<211> 75

<212> PRT

<213> Saccharomyces sp.

<400> 16

His His Ala Glu Pro Gln Ala Ala Gly Gly Phe Cys Leu Phe Ser Asn
1 5 10 15

Val Ala Val Ala Ala Lys Asn Ile Leu Lys Asn Tyr Pro Glu Ser Val
20 25 30

Arg Arg Ile Met Ile Leu Asp Trp Asp Ile His His Gly Asn Gly Thr
35 40 45

Gln Lys Ser Phe Tyr Gln Asp Asp Gln Val Leu Tyr Val Ser Leu His
50 55 60

Arg Phe Glu Met Gly Lys Tyr Tyr Pro Gly Thr
65 70 75

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1 5

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1 5 10

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1 5

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Gly Gly Tyr Glu Asn Pro

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1 5

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Gly Val Asp Ser Asp Thr
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Glu Tyr Phe Pro
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1 5

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1 5

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<210> 42
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His Gly Thr Phe Phe Pro
1 5

<210> 43
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Asp Gly Asn Phe Phe Pro
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<400> 45
Trp Ala Gly Gly Leu His His Ala
1 5

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1 5

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Trp Ala Gly Gly Leu His His Ala
1 5

<210> 48
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Trp Ser Gly Gly Trp His His Ala
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Arg Pro Pro Gly His His Ala
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Arg Pro Pro Gly His His Ala
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<400> 54

Tyr Ile Asp Leu Asp Ala His His Cys Asp
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Tyr Ile Asp Ile Asp Ile His His Gly Asp
1 5 10

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Tyr Ile Asp Ile Asp Ile His His Gly Asp
1 5 10

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<400> 57
Tyr Ile Asp Ile Asp Ile His His Gly Asp
1 5 10

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Tyr Val Asp Leu Asp Leu His His Gly Asp
1 5 10

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<400> 59
Ile Val Asp Trp Asp Val His His Gly Asn
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<400> 60
Ile Val Asp Trp Asp Ile His His Gly Asn
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Ile Val Asp Trp Asp Val His His Gly Gln
1 5 10

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Ile Val Asp Trp Asp Val His His Gly Asn
1 5 10

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Ile Val Asp Trp Asp Val His His Gly Asn
1 5 10

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Gly Gly Gly Tyr
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Glu Gly Gly His
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Ser Val Ala Val Ala Ala Arg His Ala Gln Thr Ile Ser Gly His Ala
20 25 30

Leu Arg Ile Leu Ile Val Asp Trp Asp Val His His Gly Asn Gly Thr
35 40 45

Gln His Met Phe Glu Asp Asp Pro Ser Val Leu Tyr Val Ser Leu His
50 55 60

Arg Tyr Asp His Gly Thr Phe Phe Pro Met Gly
65 70

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1 5

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Gly Xaa Cys Xaa Xaa Asn
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<212> PRT

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<223> Any amino acid

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Val Xaa Thr Ser Xaa His
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Xaa Glu Gly Gly Xaa
1 5

41